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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--|----------------------|---------------------|------------------|
| 09/828,634 | 04/05/2001 | Francis S. Nakayama | 0217.97R | 5519 |
| 25278 | 7590 03/31/2003 | | | |
| USDA-ARS-OFFICE OF TECHNOLOGY TRANSFER | | | EXAMINER | |
| WESTERN RI | VISORS OFFICE EGIONAL RESEARCH CENTER | | NUTTER, NATHAN M | |
| 800 BUCHAN ALBANY, CA | | | ARŢ UNIT | PAPER NUMBER |
| | | | 1711 | |

DATE MAILED: 03/31/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | pplicant(s) | | | | |
|---|--|---|--|--|--|--|--|
| | | 09/828,634 | NAKAYAMA ET AL. | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Nathan M. Nutter | 1711 | | | | |
| | Th MAILING DATE of this communication app | | | | | | |
| Period fo | or Reply | | | | | | |
| THE I - Exter after - If the - If NO - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply to period for reply is specified above, the maximum statutory period to return the period for reply within the set or extended period for reply will, by statute the terply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be within the statutory minimum of thirty (30) dwill apply and will expire SIX (6) MONTHS from the application to become ABANDON | timely filed lays will be considered timely. om the mailing date of this communication. NED (35 U.S.C. § 133). | | | | |
| 1)🖂 | Responsive to communication(s) filed on 11 f | March 2003 . | | | | | |
| 2a) <u></u> | This action is FINAL . 2b)⊠ Th | is action is non-final. | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-19</u> is/are pending in the application. | | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-19</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | | |
| 8)□ | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Applicati | on Papers | | | | | | |
| 9) 🗆 - | The specification is objected to by the Examine | r. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| 11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12)☐ The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority u | ınder 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a)[| a) ☐ All b) ☐ Some * c) ☐ None of: | | | | | | |
| | 1. Certified copies of the priority documents | s have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | cknowledgment is made of a claim for domestic | • | | | | | |
| a) | The translation of the foreign language protections of the foreign language protection. | visional application has been re | eceived. | | | | |
| Attachment | | - p 25 5.0.0. 35 12 | | | | | |
| 1) Notice 2) Notice 3) Inform | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) | 5) Notice of Informa | ry (PTO-413) Paper No(s) I Patent Application (PTO-152) | | | | |
| J.S. Patent and Tra PTO-326 (Rev | | ion Summary . | Part of Paper No. 16 | | | | |

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DETAILED ACTION

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

The rejection of claims 1-19 under 35 U.S.C. 103(a) as being unpatentable over Kay et al taken with Bultman et al is hereby expressly withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 11 and 17-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitations in claim 8 of the terms "acetal" and "vinyl", and in claim 11 of "allylic" and "amino" render those claims as vague and confusing. These terms refer to functionalities, and do not serve to reasonably convey to one having an ordinary skill in the art exactly what may be embraced, thereby.

In claims 17-19, the composite is defined by its properties and not by its composition or other factors determinative thereof. As such, the proper metes and bounds of the claims cannot be clearly ascertained, and the claims are, thus, vague.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Schloman, Jr., newly cited.

The reference to Schloman teaches the production of composites that may comprise at column 3 (lines 11-44) particulate bagasse material from the guayule plant, *Parthenium argentatum*, in admixture with guayule resin, broadly a vinyl-type resin, as recited in claims 1-3, 7, 8 and 13. Note column 1 (lines 18-45) for the processing of the guayule plant to produce the bagasse, as recited in claims 4 and 5. Further, note the paragraph bridging column 5 to column 6, and column 4 (line 37) to column 5 (line 29) for the processing of the plant, *per se*, as recited in claim 6. The proportions of constituents, as recited in instant claim 9, are shown at column 8 (lines 7-11) of the reference. Note column 7 (lines 45-61) for the use of spray layering techniques for the application of the resin, as in claim 14. At column 6 (lines 48-61), the reference teaches the plant materials contemplated for use herein, and recited in claim 16, are disclosed. Finally, note Examples 1-4 at column 8.

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Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schloman, Jr. as applied to claims 1-9, 13, 14 and 16, above, and further in view of Chow, newly cited.

The reference to Chow teaches the production of composite materials that may comprise plant fibers, including bagasse, as taught by Schloman, Jr., that may be derived from physical processing, admixed with thermosetting or thermoplastic resins. Note the passage from column 1 (line 51) to column 2 (line 40) for the disclosure of the various plant fibers employed to produce the fibers of the composite. The weight percentages of the constituents are also disclosed, as recited in claims 14 and 15. In that regard, further note column 1 (7-21). The reference discusses the resins employed with the fibers at column 3 (lines 4-28), including thermoplastic, as recited in claim 8, and thermoset, including the use of urea-formaldehyde, as recited in claims 10 and 11.

The reference to Schloman, Jr. teaches essentially what is recited in the instant claims, except that the patent fails to teach the use of or the particular thermoset resins, as herein claimed. The reference to Chow teaches that it is known to employ these resins with lignocellulosics, that have been processed to a fibrous consistency. The particular source of the plant fiber is not critical to the invention of Chow. The reference to Chow further teaches that with compression, as opposed to spraying (air-layering), a fiberboard product will result, as recited in instant claim 15.

The reference to Kuester, cited of interest, teaches a process wherein biomass materials, including those derived from guayule plant, *Parthenium argentatum*, may be employed to produce granulated feedstock by a continuous thermochemical indirect liquefaction process. Note column 3 (line 39) to column 4 (line 42) for the plants that may be employed in the patented process. Note the Abstract and the many Examples. The reference fails to suggest or clearly teach the inclusion of these materials with resins, as herein claimed. As such, the patent is not deemed to present a bar to the patentability of the instant claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan M. Nutter whose telephone number is 703-308-2443. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 703-308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Nathan M. Nutter Primary Examiner Art Unit 1711

nmn March 25, 2003